

STOCKPILING; DEVELOPMENT OF SUBMARGINAL RESOURCES;  
CONSERVATION AND SUBSTITUTION,  
11 February 1946.

L 94-225

CONTENTS

	<u>Page</u>
Introduction--Brigadier General Donald Armstrong, Commandant, The Industrial College of the Armed Forces . . . .	1
Guest speaker--Mr. E. W. Pehrson, Chief, Economics and Statistics Branch, Bureau of Mines, Department of the Interior . . . . .	1

233

STOCKPILING; DEVELOPMENT OF SUBMARGINAL RESOURCES;  
CONSERVATION AND SUBSTITUTION, 11 February 1946.

GENERAL ARMSTRONG:

Gentlemen, our speaker is a graduate of Stanford University in mining and metallurgy, and he has followed his profession in the years since then. He has been associated with the Army, with the Army and Navy Munitions Board, and with the Planning Branch of the old Office of the Assistant Secretary of War on the important problem of metals and minerals stockpiling. At the present time his assignment is Chief of the Economic and Statistics Branch of the Bureau of Mines in the Department of the Interior. His subject is "Stockpiling; Development of Submarginal Resources; Conservation and Substitution."

Mr. Pehrson suggested that he might be critical of various Army and Navy practices. I told him that we were critical; that that was our function; that we were here to pay no compliments to anybody; that the assumption was that we did a fairly good job in the last war, but it was not good enough to win another war if we ever have one. Or, if we do not improve, it is not enough to keep us from getting into a war. Therefore, we welcome the opportunity to hear from a man who knows more about the stockpiling of minerals and the whole situation of stockpiling than almost anybody else. Gentlemen, Mr. Pehrson, of the Department of the Interior.

MR. PEHRSON:

Gentlemen, it is a great pleasure to renew this intimate contact with the procurement phase of Army and Navy activity. I was telling General Armstrong a few minutes before coming in here that, while this is my first lecture before the Army Industrial College, my first contact with your problem and your personnel began in 1928, when I first joined the Bureau of Mines. Periodically we had a parade of new officers coming over to us. They would come in and say, "I have been assigned the job of writing a new procurement plan for manganese. For God's sake, what is manganese?" We would pursue the task of educating those people conscientiously; and just about the time when we thought we had them in the groove, lo and behold, we would find that a new group of officers would come in to take over the job.

That brings up the first point to which I think you ought to give some consideration. In dealing with the procurement problem of these highly technical subjects, these raw materials, there should be some continuity in the personnel planning and studying the problem. This is the only way expert judgment and competent plans can be developed.

Stockpiling is, of course, a device for securing an adequate supply of strategic and critical raw materials in the event of war. The original concept of stockpiling was that it would provide for only those materials which we could not produce in the United States. During this war we have broadened our concept quite a good deal. We found, for example, that even though we have resources, it may be desirable to import materials and thus

save the manpower, essential services, and critical materials that would be diverted to expanding plant capacity in an emergency.

Those of us who have been engaged in making estimates of what the stockpiling requirements might be for an emergency have been confronted with the reality that man's judgment is not infallible. It is most decidedly fallible, for which reason we have to have some other second line of defense planned that will help us out in case our judgment goes wrong on stockpiling.

Stockpiling in anticipation of war is a very ancient practice. Those of you who read your Bible frequently will find references to the stockpiling of food and miscellaneous weapons in the ancient days of Babylonia. Throughout history there has been, particularly on the part of nations of an aggressive turn of mind, advance preparation for war through the device of stockpiling. Of course, the stockpiling of industrial raw materials is an outgrowth of industrial warfare, and that in turn is a product of the twentieth century.

I think there is evidence to support the opinion that the Germans engaged in some stockpiling prior to World War I; but it was not done on any great scale. Both Germany and Japan did considerable stockpiling in advance of this war. Doubtless other speakers in your course here will deal with that subject in more detail. The United States, however, has been very slow in catching on to this modern device for preparing for war.

I have been unable to find a convincing reference which would indicate who first thought of stockpiling in connection with industrial preparedness in this country. Occasionally we hear claims that Barney Baruch was the first to suggest it. In his book "American Industry in the War" I find no reference to stockpiling but I do find recommendations in his report to the President of 24 December 1919: "through a system of stimulation by a protective tariff, a bonus, an exemption from taxation for a limited period, licensing, or any other effective means, every possible effort should be made to develop production of manganese, chrome, tungsten, dyestuff, by-products of coal, and all such raw materials usually imported but which can be produced in quantity in this country."

I cannot see in that any particular recommendation of stockpiling as a device for military preparedness. Even in the preface to this book, which was written in 1941, there is no work that suggests that he was thinking of stockpiling even at that late date, notwithstanding the fact that the Government had already adopted certain stockpiling measures.

The first reference to stockpiling that I can find was contained in a report on manganese which was prepared for the Assistant Secretary of War in January 1924 by a joint committee of the American Institute of Mining and Metallurgical Engineers and the Mining and Metallurgical Society of America. Some of the names on this committee may be familiar to you. C. M. Weld was the chairman of the committee. He was employed by the Government at that time. There was Mr. D. F. Hewett, presently employed by the Geological Survey; and J. W. Furness, formerly chief of

the Economics and Statistics Branch of the Bureau of Mines. This is the first published commendation of stockpiling as a device for preparing for raw materials in the event of war that has come to my attention. This is rather strange, too, because during the last war we had many hectic experiences. I recommend that you read a book entitled "Industrial America in the World War," by Grosvenor B. Clarkson, which presents many interesting accounts of shortages during World War I.

You will recall that in 1921 the National Defense Act was amended to make the Assistant Secretary of War responsible for planning for industrial mobilization for war. One of the outgrowths of that activity was the appointment of a Mineral Advisory Committee to the Assistant Secretary of War; its chairman, Colonel A. S. Dwight, a distinguished member of the mining profession, played an important part during the last war in solving some of the mineral problems. This committee organized several subcommittees under the auspices of the American Institute of Mining and Metallurgical Engineers and the Mining and Metallurgical Society of America. They submitted confidential reports on ten of the minerals that were highly critical during the last war--antimony, chrome, graphite, manganese, mercury, petroleum, platinum metals, tin, tungsten and vanadium. These reports were published in 1925, with modifications to eliminate some of the military information, in a volume entitled "International Control of Minerals." If any of you are interested in getting the early views on this subject, you will find this a very excellent reference. The reports in this volume on manganese and antimony contain recommendations for stockpiling. No mention of stockpiling is contained in the other eight reports.

Generally speaking, the idea of encouraging the development of sub-marginal domestic resources through tariffs was frowned on in these early reports.

In 1921, when the new Administration came in following the election of Mr. Harding, the tariff was up for discussion, and Mr. Baruch's suggestion that we should look to the development of domestic sources in these so-called deficient raw materials through tariff devices was given favorable consideration. As a result we imposed rather high tariffs on some of these strategic materials, notably tungsten, antimony and manganese. Everybody sat by, expecting that by that device we would solve the strategic problem of these metals.

However, the tariffs proved to be ineffective. From 1923 to 1937, fifteen years, notwithstanding a tariff on manganese that ranged from fifty to over one hundred percent ad valorem, the domestic mines produced only 8 percent of the metallurgical grade manganese ores used in this country. Much of the ore produced was subgrade and could not be used for the manufacture of ferromanganese, which is, of course, the highest strategic use of manganese ore. Only 4 percent of the ore used in making ferromanganese was of domestic origin. For this small contribution to national defense steel producers and consumers were forced to pay 66 million dollars in import duties.

I stated at the start that I was going to be a little critical of the military branches of the Government. Under the direction of Congress

in the amended National Defense Act of 1921 it seems to me that a militant attitude on stockpiling as a factor in preparedness on the raw material front was called for, particularly in the light of the recommendations of such distinguished organizations as the American Institute of Mining and Metallurgical Engineers and the Mining and Metallurgical Society of America. But we find that, while there was considerable enthusiasm for stockpiling in the Industrial College and among the officers assigned to the Commodity Division of the Army and Navy Munitions Board, no public effort, no serious effort, was made to get the Congress to legislate and provide funds for the stockpiling program.

The only published reference in those early days that I could find is a statement in the 1927 annual report of the Secretary of War which points out the benefits that would be derived from the stockpiling of manganese ore. But, so far as I have been able to determine, that was never translated into a request for legislation that would permit the accomplishment of that objective.

In that same year, too, unfortunately a high official of the War Department joined forces with a vociferous domestic manganese lobby that was agitating for higher and higher tariff protection. Men in the Government who were familiar with the resources of the country realized that there was little hope for improvement in our domestic manganese situation through tariff protection; but, nevertheless, this official of the War Department did give public utterance to the objectives of that group, which I think was not in the public interest.

In February 1932, the Assistant Secretary of War asked the Manganese Committee that had reported some years before to review the situation in manganese and make further recommendations. By this time the very large low-grade manganese deposits in Chamberlain, South Dakota, had come to attention. Since there is a tremendous amount of manganese metal in these deposits, although it is of very low grade, it was felt by the committee that something should be done in the way of research to see what could be done with these low-grade deposits, at least to determine if some method could be developed whereby they could be used in case of extreme emergency.

So the second report of the Manganese Committee, which was prepared in February 1932, added a new idea to the preparedness program, namely, that stockpiles in themselves do not constitute a one hundred percent protection and that research should be carried on to develop as a second line of defense emergency measures that could be used to produce from our submarginal resources in time of war.

I have stated that during the period 1921 to 1932 the military branches of the Government were quite negligent and did not capitalize on the opportunities that were available to them to develop a sound raw material policy for the United States Government. I think that we should not be too harsh in this criticism, because, after all, this was a period of disarmament conferences, disarmament treaties, and the scrapping of our navy. We had the period of Coolidge economy. We had the Quaker influence of Mr. Hoover in the White House. So the over-all climate in this country was not receptive to strong measures for national defense.

261

An interesting example of the shortsightedness of the Government is afforded by an incident that occurred in 1932. At that time several of the mineral people in Washington conceived the idea that, if we could work the manganese deposits of Butte and put unemployed miners to work on something constructive rather than just doling out relief, we could store the manganese for future use. Despite considerable pressure on government authorities, these gentlemen were unable to sell that idea. So another golden opportunity was lost.

In 1935 the reciprocal trade treaty program was well under way and the State Department wasted no time in getting after the manganese tariff, which it reduced fifty percent in the Brazilian trade agreement, negotiated in that year. In spite of a monumental hue and cry from the manganese lobby, to the credit of Mr. Hull and Mr. Welles, the reduction in the manganese tariff has been maintained.

In 1936 an aggressive congressman from a Western state -- some of you Navy people may have known him -- saw an opportunity in the stockpiling idea to create legislation that would result in subsidizing the domestic industry. He tried in 1936 to get an appropriation of, I think, eight million dollars for the Navy Department for the purchase of strategic and critical materials. They were to be exclusively of domestic origin, the concept being that, if we stimulated production, even though prices would be high, we might start something that would eventually develop into a going industry.

However, the Senate refused to go along with the idea that these purchases should be exclusively of domestic origin. But they did go along with a small appropriation for the procurement of stockpile materials. In 1938 three and a half million dollars were appropriated for this purpose, and I think in a subsequent year an additional small sum was appropriated.

However, in the expenditure of this fund I think the Navy yielded a little too much to the influence of the manganese lobby. One of the cries you always hear from this group when the Government sets up a procurement program for the purchase of strategic and critical materials is that the specifications have been set so high that the domestic producers cannot compete because they cannot deliver goods of the quality requested by the Government.

Well, the Navy yielded to this complaint and issued bids for the purchase of manganese ore way below the standard quality. There was such a resentment to this move on the part of consumers, the producers of ferromanganese, that the Navy was forced to withdraw its reduced specifications and the accompanying announcements for bids. But in the compromise that followed they were forced to buy ferromanganese made of domestic ores, and for that they paid 43 percent more than what the same material could have been purchased for from foreign sources.

Incidentally, with the very limited sum of money that was available they could have acquired a great deal more security had they bought

high-grade foreign ores, because unit for unit ferromanganese costs several times as much as manganese ore.

This effort to subsidize domestic production of strategic minerals was followed up by legislation introduced into the Senate. The proposed bill would have authorized the purchase of domestic manganese ores at prices more than twice as high as the prevailing prices of ores of foreign origin. Also it provided for the purchase of low-grade ores which were unsuitable, and still are unsuitable, for the manufacture of ferromanganese according to American practice.

Hearings were held on the Senate bill; and, when the Military Affairs Committee of the Senate, under the chairmanship of Elbert Thomas of Utah, found that the five government agencies interested in stockpiling were all opposed to the measure, the senators requested the representatives of the executive branch of the Government to get together and frame a stockpiling bill that would meet the requirements of the executive branch.

This was done through the instrumentality of an interdepartmental committee on strategic materials which functioned under the chairmanship of Herbert Feis of the State Department. The committee contained representatives of the War, Navy, Interior, State and the Treasury Departments.

Meanwhile Dr. John W. Finch, then director of the United States Bureau of Mines, had given an address on the strategic mineral situation in St. Louis in April 1938. In this address he stressed the international situation, which was growing worse by leaps and bounds, and pointed out our unpreparedness in the raw material field, particularly in the mineral field, and urged that the Government adopt a two-point program for meeting the emergency.

The first part of his program called for stockpiling and he recommended that a substantial appropriation be made for the purchase of strategic and critical materials to be stored for emergency use. The second part of his program had to do with the inventorying of our mineral wealth and the conduct of research designed to develop methods for using off-grade materials that were available in the United States.

This program was adopted essentially in the legislation proposed by the Interdepartmental Committee, and was eventually written into the law now known as the Strategic Materials Act of 1939.

In asking for this legislation the representatives of the executive agencies naturally wanted the procurement placed on a sound business basis. They wanted the materials to be purchased to be of standard grade, so that, when the time came to use them, there would be no disruption of the metallurgical practices in this country; and naturally they wanted to purchase the materials as cheaply as possible.

But a concession had to be made to the domestic group, and the "Buy American" clause was inserted in the bill by Congress. Certain other concessions were made to American producers, notably the waiver of bonds

and delay in delivery under a contract. These terms caused considerable trouble in carrying out the procurement program and actually resulted in a large part of the available fund being tied up in contracts that could never be filled. Some of you may have heard about the famous Chrome Queen, and how she tied up a large sum of government money in a chrome contract that those of us in the mineral field felt could never be filled. That is one of the reasons why the agencies have been so adamant in insisting on clean-cut procurement authority under the new bill.

As the 1939 stockpiling measure was being considered in Congress the Army and Navy Munitions Board requested the Mineral Advisory Committee to the Assistant Secretary of War to again become active and give the Board new reports on the status of strategic and critical minerals. Late in 1938 a committee was organized under the chairmanship of C. K. Leith and containing representatives of the Navy Department, the Bureau of Mines, and the Geological Survey, and two or three well-known mining men from industry.

Seventeen subcommittees were appointed under this general committee, and seventeen reports on what seemed at that time to be the outstanding strategic and critical minerals were prepared and submitted to the Army and Navy Munitions Board in the latter part of 1939. However, the Board did a very poor job of translating the advice obtained from these committees into official action.

The first mistake that was made--and that was an error of judgment that I think is wholly understandable in the light of the circumstances as they developed in this war--was a gross underestimate of industrial objectives. The Mineral Advisory Committee asked for instructions as to what industrial production level should be used as the basis in planning the raw material reports. The Army and Navy Munitions Board advised the committee to assume that full use of existing steel capacity would be made. At that time the capacity was 67 million short tons per year. As you know, we had to expand steel capacity up to 90 million or more tons during this war, so our sights were much too low even as late as 1939.

Also the conservative viewpoint of the military was quite prevalent in the translation of these recommendations into official procurement plans, as will be noted from a comparison of the figures, which I shall give you. In the case of metallurgical chromite the committee recommended for a two-year emergency a stockpile of 400,000 tons, and the procurement plan included a recommendation of only 225,000 tons, scarcely more than half.

The Mineral Advisory Committee recommended a stockpile of 200,000 long tons of chemical-grade chromite and the procurement plan called for 124,000 tons. On refractory-grade chromite the committee recommended 125,000 long tons, but the Army and Navy Munitions Board's procurement plan stated that we did not require any.

The committee recommended 2,000 tons of graphite for the stockpile, but the Board thought that none was required. It also recommended that

four million dollars be expended for industrial diamonds, but again the Board advised that no stockpile was needed.

On manganese the board did better, The committee recommended 945,000 tons, and the procurement plan recommended 1,200,000 tons. However, the board's plan failed to recommend a stockpile of battery-grade ore, whereas the committee had recommended a substantial tonnage.

In the case of mercury, again the committee recommended 12,000 flasks, and the board recommended none. On mica, the committee recommended 2500 short tons, and the board recommended 2200 short tons.

The Committee recommended 154,000 tons of tin for stockpiling, against 50,000 for the Army and Navy Munitions Board. In tungsten the committee recommended 17,000 tons and the Board was satisfied to recommend 2,000 tons.

Now, admitting that both columns of figures look ridiculously low in the light of the demand that actually developed, they nevertheless point out that there has been throughout all this period a lack of appreciation of the importance of raw materials in your industrial mobilization planning and certainly a complete lack of realism in appraising the magnitude of the need. I think all of us have been rudely awakened by the experiences of this war, and we can be expected to do a better job in the future.

Shortly after the passage of the Stockpiling Act in 1939, which provided only one hundred million dollars for stockpiling purposes, a figure which we realized at that time would only be a beginning, the Germans overran the Low Countries of Europe in the spring of 1940. It was then that we finally awakened to the fact that we were in for trouble and that we had to get going in a big way. At that time the major responsibility for stockpiling was transferred to the National Defense Advisory Commission, which operated through various subsidiaries of the Reconstruction Finance Corporation. As a result the stockpiling activity under the Act of 1939 was reduced to practically nothing.

I might point out also, again to emphasize the political angles in matters of this kind, that when the Administration asked for the first twenty-five million dollars of one hundred million dollars authorized under Public Law 117, certain members of Congress succeeded in having the appropriation reduced from twenty-five million to ten million dollars on the ground that the domestic deposits were being explored by the Government, and that the expectation from that exploration program was such that we would not have to purchase these ores from foreign sources. Not only was the original sum authorized much too small, but even that small pittance could only be gotten out of Congress in the face of political opposition.

I presume all of you are quite familiar with the various activities on stockpiling that have taken place during the war. They have been chiefly under the supervision of the War Production Board. I have not

263

been intimately acquainted with the details, but, as you know, procurement was conducted on a very large scale. In some instances we paid outrageous prices for materials that could have been procured for a fraction of the cost had they been stockpiled in advance.

In the spring of 1944 our Congressional friends again realized that they could do something for the domestic producer back home by capitalizing on the publicity that strategic materials got during the war. A very ambitious stockpiling bill was introduced into the Congress, which, of course, met violent opposition from all of the executive branches of the Government. This action again awakened interest in the executive branch in peacetime stockpiling, and through a subcommittee on metals and heavy industries which functioned under the State Department's Executive Committee on Economic and Foreign Policy we undertook to draft a new bill. This bill has traveled a torturous path but the administrative measure has been accepted substantially by the Senate and I understand hearings are going to be held in the near future in the House.

I had planned to go into the details of this bill, but I see the time running short and I have a few more points I want to stress in the matter of stockpiling.

First, we want to get the idea firmly established that stockpiling in itself is not a one hundred percent protection in the strategic minerals problem. Therefore we in the Bureau of Mines have been pressing for a second line of defense--the exploration and search for domestic submarginal deposits to be followed up by research to develop ways and means of utilizing these deposits, in the event of an emergency. We have hopes that as a result of such work we may even establish some peacetime industry.

I have already mentioned the fact that a new concept of stockpiling includes the necessity for economy in the use of manpower, equipment and strategic supplies. It seems to me that these new concepts emphasize the need for stockpiling as a matter of national policy. It is believed also that we should lay very strong emphasis on the fact that these stockpiles should be obtained from foreign sources. After all, a stockpile is a device for supplementing domestic resources. If you merely take metal out of a mine and store it above ground, you have not greatly increased the resource position of the Nation. That point of view is, of course, extremely unpopular in some of our mining regions, where they feel that the stockpiling program should be used as a device for paying subsidy payments to submarginal mines.

It is also important that we should obtain standard grade material for our stockpiles. We cannot collect a lot of low-grade, off-grade minerals and then expect to use them in time of emergency with any degree of efficiency. In such time we want our industries to function with maximum efficiency, and this can be accomplished only if industry has the type of raw materials it is accustomed to using.

We also want to avoid the necessity for changing industrial practices. During the First World War, because of our inability to obtain

standard-grade manganese ores, we had to lower the specifications on ferromanganese. That in turn necessitated the lowering of the specifications for many weapons and other items of military importance. I have no doubt that that action was reflected in larger casualties in battle.

Another item that we should bear in mind in carrying out a stockpiling program is the importance of political and economic as well as the geographic factors in the procurement plan. On this point the military have been unwilling to see eye to eye with the civilian agencies of the Government. I heard one high Navy officer one time express his view something like this: "We have got the largest Navy in the world. Hell, what do we want stockpiling for? If we want materials now, we can just go out and get them." Naturally such a point of view sends chills down the backs of the people in the State Department.

The Army and Navy Munitions Board has been reluctant to push stockpiling such things as nickel, which is available in Canada, on the ground that it is just across the border. Since Canada is likely to be our ally in a future conflict we need not be much concerned about supplies of nickel. But some of us feel that there may be circumstances in the future when Canada wishes to be neutral, and it may be to our interest to respect that neutrality. For this reason I think we should insist that our stockpiling program should include a very large tonnage of nickel.

Your program today calls for some comments on conservation and substitution. These are important factors but I believe very limited results can be obtained from conservation and substitution. Certainly I should think a well-planned industrial mobilization program would try to avoid in time of war as much change as possible from peacetime practices, because peacetime practices are changed, delays are incurred in mobilization of industry. These should be avoided wherever possible. During this war we have been forced into many substitutions where we would have been much better off had we had the original material. We should endeavor to avoid all the confusion that results from substitutions in times of emergency.

Looking into the future, I feel we are beginning to see the end of the large measure of self-sufficiency we have enjoyed in the past in many important minerals, notably copper, lead, zinc and petroleum. I see very little hope of improving our position in many materials, such as manganese, chromite, tin, tungsten, mica, graphite, quartz crystals and industrial diamonds that have been on the critical and strategic lists for many years. These viewpoints are based on the reserves as we know them today. In addition to declining reserves, we have a policy in the United States of constantly increasing the wage scale; I think it is fair to say that, so far as labor is concerned, there is a tendency to discourage measures to increase the productivity of labor. Consequently you have another factor which contributes to rising costs of mineral production in the United States, and as costs increase much of our commercial reserves become non-commercial.

In addition we have the reciprocal trade program under which the tariff protection for some of our highly important metals, such as copper,

lead and zinc, is threatened. If we have substantial cuts in those tariffs-- and I believe there is a fair chance that we will--we shall add another economic factor that is going to cause a decline in our self-sufficiency.

From a military point of view, dealing self-sufficiency in the sinews of war is bad, and, until we get these stockpiles built up in this country and in sufficient size I think that the military agencies should use their power of persuasion to see that we go easy on some of these programs that are weakening our basic position in raw materials.

I have talked already more than my allotted time but if you have any questions I shall be glad to try to answer them.

GENERAL ARMSTRONG:

Mr. Pehrson, I would like to ask you this question: In our various advisory committees from the various metal industries I discovered to my astonishment that there was considerable hostility to the stockpiling idea on the part of producers of metals. They said that this was sort of a sword of Damocles overhanging their heads as a constant threat to the price structure and to their welfare, because they never could tell when the Government would decide that the stockpiles were something, either for political or economic reasons, to throw on the market. Have you run into that attitude? What safeguards can be set up so that industry will be with us instead of against us on stockpiling?

MR. PEHRSON:

I think selfishness is always rampant with the human race. I regret to say that substantial elements in the mineral industry have been opposed to stockpiling until recently, for the sole reason that they felt that these stocks might be used as a control over markets.

With the end of the war imminent, a year or so ago these same people were very much alarmed about the Government stocks then on hand. They feared that if the war terminated suddenly, these stocks might be dumped on the market and we would repeat the deflationary experiences that followed World War I. The copper industry, for example, took ten years to overcome the deflationary effect of the dumping of postwar surplus stocks of scrap and ingot metal on the market after the last war. So self-interest has caused them recently to get on the band wagon for stockpiling.

Now we are having a large postwar demand for raw materials, and, much to the disappointment of those of us who are ardent stockpilers, it looks as if we are going to end the war with very little surplus to convert into permanent stockpiles. So we of our industry friends day by day are getting less enthusiastic on this question of stockpiling.

Nevertheless, the American Mining Congress is solidly behind the legislation. The way the bill is now written, with the changes that were made by the Congress at the request of the American Mining Congress, it provides adequate safeguards against the dumping of these materials on the market.

A STUDENT:

Mr. Pehrson, I have a little fear about asking this question, because I think you will decide that the average IQ of the class is not 120 when I ask it. It seems as if the United States had sort of a cross of silver hung over its head all during the war. Because of the shortage of copper, many things had to be taken care of by using silver. It seems to me there was a large silver stockpile which was owned by the Government which for some reason, on account of statutory or other reasons, did not permit it being used. Is that correct?

MR. PEHRSON:

I think you are largely correct. I am not sure, however, that there were any demands for silver for war uses that were not met by releases of government silver.

The silver question, of course, is one loaded with western politics. There is now brewing out west--I just got back from a tour last Friday--considerable pressure for an increase in the price of silver from 71 cents to \$1.29. It is claimed that this increase in the price of silver would give the western lead producers two more cents per pound for lead produced; and that would be, of course, a very nice subsidy.

A STUDENT:

I have one question on this stockpiling. I thought a little bit about this during the war. We had to take out some copper tubes and substitute silver for them. I do not see any reason why we cannot have an RFC for materials just like we have it for bank credits and so forth. We always have a favorable balance in our business with foreign countries. For instance, England needs some way to balance off. Why could not we get tin from the English possessions or things like that? Would not that be balanced out where we can ship stuff into the United States? Since the industries we are talking about are opposed to the military getting control of the stockpile, why not let the RFC have it?

MR. PEHRSON:

I disagree with one of your premises--that industry does not want our military men to get control of the stocks. I think they would rather see military men get control of the stockpile than the civilian agencies of the Government that are opposed to having the Army and Navy dominate the stockpiling program.

The new stockpiling bill, of course, creates a chairman of a stockpiling board. He has vast authority, stemming from the President, to conduct a very substantial stockpiling program.

At the Senate hearings a question was asked as to what sum of money was contemplated in this program, and I ventured the guess that a sound stockpiling program would involve the expenditure of four billion dollars. Nobody seemed to balk at that, and I did not see anything in the record

265

that indicated that Congress felt that sum excessive. But if that bill goes through--and I feel sure that it will--there will be something similar to what you suggest. Whether the RFC or Treasury Procurement will be the actual buying agent remains to be seen. Does that answer your question?

A STUDENT:

Yes. I want to see it done so it will not result in an unfavorable balance of trade.

MR. PEHRSON:

I think that this will be a very positive contribution to increasing international trade. On the other hand, it seems to me that the news over the weekend and the political announcements, as well as the announcement with respect to the new Five-Year Plan in Russia, raise a very serious question as to whether there is going to be a free exchange of raw materials and whether Russia is going to cooperate with us in our desire to build up military stockpiles in this country. It is perfectly obvious that she is out to protect her own interests and that she may use her powers to frustrate us in our endeavor to procure the raw materials that we want to get.

A STUDENT:

That immediately brings up the question of how long we expect the future emergency to last. How long, may I ask, do you figure that these stockpiles should be built up to cover?

MR. PEHRSON:

A five-year supply was the maximum stockpile requirement that was contemplated by the Army and Navy Munitions Board in January 1945.

A STUDENT:

The bill contemplates the purchase of materials for stockpiling, and contemplates stockpiling in excess of our requirements for war reserves. So it is really a replacement of our loss of natural resources and a balancing of our trade? Is that correct?

MR. PEHRSON:

That brings up the question, What is the military requirement in times of war? One of the differences between the civilian and the military agencies has been the desire of the civilian agencies to have some voice in the civilian economy during wartime. We would like to see the stockpiling program include enough material so that the civilian economy could get a better deal than it did in this war. The brass in military circles do not like that point of view, because they feel that the civilian economy has been pampered during this war. Do you get the point that I have in mind?

A STUDENT:

Yes. Does the bill permit a different stockpile level than that recommended by the Army and Navy Munitions Board? Is it the one recommended by whoever the backers of this particular bill are, which I assume are the metallurgical societies?

MR. PEHRSON:

The present bill, as I recall it, permits the Army and Navy to name their stockpile objectives, and the ANMB has discretion to add to them anything it deems necessary to protect the diplomatic interests of the country and the domestic economy in times of emergency. But the bill contemplates stockpiles only for use in emergencies. The stockpiles are rather drastically frozen and cannot be used for any purpose during peacetime.

A STUDENT:

I believe you said that this was a mistaken policy on copper by the tariff interests. I cannot quite reconcile that statement with a previous one in which you said that you thought our reserve was being rapidly depleted.

MR. PEHRSON:

My viewpoint on that runs along this line: If you have ever been out west in the mining states, you will realize that cities like Butte, which is dependent very largely on copper mining, are tremendously dependent on the excise tax on copper. Butte is in a vulnerable position if we reduce the protection that it now has. Consequently, if we are going in for a radical change in our tariff position on these metals, we will precipitate social conditions in certain parts of the country that will be very difficult to handle.

As a long-time proposition I quite agree that, as our self-sufficiency declines because of our declining resources, we should adjust our tariff policy so as to facilitate the importation of metals. But in no event do I believe we should juggle with tariffs and force a curtailment of domestic production until our stockpiling program is well on the road to completion. I think it would be very bad for us during the next ten years, with the difficult international situation that appears on the horizon, if we allow our self-sufficiency in copper, lead and zinc to become greatly impaired.

GENERAL ARMSTRONG:

Mr. Pehrson, I think out of consideration for you we had better close the meeting, with thanks from me personally and from the Industrial College for a very valuable and effective talk.

(28 June 1946--200.)S